

Abstract

Methods and compositions are disclosed for controlled addition of components that decrease the viscosity of the viscoelastic surfactant fluids or for controlled changes in the electrolyte concentration or composition of the viscoelastic surfactant fluids. One aspect of the invention relates to the use of internal breakers with a delayed activation. Another aspect of the invention relates to the use of precursors that release a breaking system such as alcohol by a process such as melting, slow dissolution, reaction with a compound present in the fluid or added to the fluid during or after the step of injecting, rupture of an encapsulating coating and de-adsorption of a breaking agent absorbed into solid particles. In another aspect of the invention, alcohols are included in a pad to reduce the low-shear viscosity and reduce the resistance to flow of the treatment fluids during a desired phase of the treatment.

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